Claims

1.   1.   A method of transferring incoming multithreaded concurrent sets of data from
2. a sending transport system to a requesting transport system comprising the steps of:
3.   retrieving said sets of data, querying a receiving queue for available data storage
4.   locations, and transferring said sets of data to a receiving queue;
5.   queuing said sets of data in said receiving queue by dividing said sets of data into
6.   blocks of data, storing said blocks of data in said available data storage
7.   locations, having associated data by using location indexes to associate said
8.   blocks of data with said corresponding storage location; and
9.   sending said sets of data by transmitting said associated data in said storage locations
10.   to said requesting transport system, and indicating said storage location is
11.   available for storing other said blocks of data.

1.   2.   The method of claim 1 wherein said transmitting said data is a point to point
2. transmission.

1.   3.   The method of claim 1 wherein said data is transmitted synchronously.

1.   4.   The method of claim 1 wherein said data is transmitted asynchronously.

1.   5.   A method of transferring incoming multithreaded concurrent sets of data from
2. a sending transport system to a requesting transport system comprising the steps of:
3.   retrieving said sets of data from said sending transport system, a receiving queue
4.   being queried for a number of available data storage locations, and said sets of
5.   data being transferred to said receiving queue;
6.   queuing said sets of data in said receiving queue, each said set of data being
7.   divided into blocks of data, determining a number of said data storage
8.   locations for storing said blocks of data, said blocks of data being loaded into
9.   available said data storage locations, providing location indexes for each of

10   said blocks of data where said location indexes associate said block of data

11   with a corresponding said storage location,

12   sending said sets of data to said requesting transport system by transmitting

13   associated data in said storage locations, and indicating said storage location is

14   available for storing other said blocks of data.

1   6.   The method of claim 5 wherein said data being transmitted is sent as a single

2   message.

1   7.   The method of claim 5 wherein said data is being transmitted as a point to

2   point transmission.

1   8.   The method of claim 5 wherein said data is transmitted synchronously.

1   9.   The method of claim 5 wherein said data is transmitted asynchronously.

1   10.   The method of claim 5 further comprising the steps of:

2   calculating a required number of said data storage locations for said sets of data.

1   11.   The method of claim 10 further comprising the steps of:

2   determining if said receiving queue has available said required number of said data

3   storage locations; and

4   signaling said retrieving process to transfer said sets of data to said receiving queue.

1   12.   The method of claim 5 further including indicating to said requesting transport

2   system that said sets of data are ready for sending.

1   13.   A method of transferring incoming multithreaded concurrent sets of data in a

2   point-to-point either synchronous or asynchronous transmission from a sending

3   transport system to a requesting transport system comprising the steps of:

4   providing a retrieving process for retrieving said sets of data from said sending

5   transport system and retrieving said sets of data from said sending transport

6   system;

7   calculating a required number of said data storage locations for said sets of data.

8   a receiving queue being queried for a number of available data storage locations,

9   determining if a receiving queue has available said required number of data

10   storage locations;

11   signaling said retrieving process to transfer said sets of data to said receiving

12   queue;

13   said sets of data being transferred to a receiving queue;

14   queuing said sets of data in said receiving queue, each said set of data being

15   divided into blocks of data, determining a number of said data storage

16   locations for storing said blocks of data, said blocks of data being loaded into

17   said available data storage locations, providing location indexes for each of

18   said blocks of data where said location indexes associate said block of data

19   with a corresponding said storage location,

20   providing a sending process for sending said sets of data to said requesting

21   transport system

22   indicating to said requesting transport system that said sets of data are ready for

23   sending;

24   transmitting associated data in said storage locations wherein said data being

25   transmitted is sent as a single message; and

26   indicating said storage location is available for storing new said blocks of data.

1   14.   A computer program product for transferring incoming multithreaded
2 concurrent sets of data from a sending transport system to a requesting transport
3 system, said computer program product having:

     4   computer readable program code means for retrieving said sets of data, querying a
5   receiving queue for available data storage locations, and transferring said sets
6   of data to a receiving queue;

7   computer readable program code means for queuing said sets of data in said
8   receiving queue by dividing said sets of data into blocks of data, storing said
9   blocks of data in said available data storage locations, having associated data
10   by using location indexes to associate said blocks of data with said
11   corresponding storage location; and

12   computer readable program code means for sending said sets of data by transmitting
13   said associated data in said storage locations to said requesting transport system,
14   and indicating said storage location is available for storing other said blocks of
15   data.

1   15.   A program storage device readable by a machine, tangibly embodying a
2 program of instructions executable by the machine to perform method steps for
3 transferring incoming multithreaded concurrent sets of data from a sending transport
4 system to a requesting transport system, said method steps comprising:

5   retrieving said sets of data, querying a receiving queue for available data storage
6   locations, and transferring said sets of data to a receiving queue;

7   queuing said sets of data in said receiving queue by dividing said sets of data into
8   blocks of data, storing said blocks of data in said available data storage
9   locations, having associated data by using location indexes to associate said
10   blocks of data with said corresponding storage location; and

11   sending said sets of data by transmitting said associated data in said storage locations
12   to said requesting transport system, and indicating said storage location is
13   available for storing other said blocks of data.